

## SACROSPINOUS LIGAMENT FIXATION (SSF) VERSUS GYNECARE PROLIFT®: A COMPARISON IN A 3-YEAR OUTCOME OF SURGICAL MANAGEMENT FOR ADVANCE (GRADE 3 AND 4) APICAL PROLAPSE

### Hypothesis / aims of study

- To compare the objective and subjective cure rate between Sacrospinous ligament fixation (SSF) and Gynecare Prolift® after 3 years.
- To assess and compare the functional outcomes and long-term complications following these two surgical modalities.

### Study design, materials and methods

In our settings, patients with grade 3 and 4 apical prolapse according to the Baden-Walker classification system [1] were either surgically managed with SSF or mesh repair using Gynecare Prolift® (total or posterior). Mesh repair was mainly performed for patients with procidentia (grade 4 prolapse in all compartments). Retrospective data was collected for patients who underwent these surgeries under the supervision of a single experienced surgeon between 1<sup>st</sup> January to 31<sup>st</sup> December 2007. Patients who underwent a combination of SSF and mesh repair were excluded.

Peri-operative and long-term post-operative details were recorded at follow-up intervals of 6, 12, 24 and 36 months. Patients who defaulted follow-up were recalled via the telephone.

Objective cure was determined by anatomical criteria of Baden-Walker  $\leq$  grade 1 [1]. Subjective cure was defined as the absence of lump at introitus, overall satisfaction with surgery and no re-treatment (surgery or use of ring pessary).

### Results

There were 29 and 34 patients who underwent SSF and Gynecare Prolift® surgery respectively. Both groups of patients were comparable in term of their demographic details, pre-existing genito-urinary symptoms and previous pelvic surgeries.

There were more Prolift® than SSF patients with grade 4 cystocele (79.4% vs 10.3%,  $p < 0.005$ ). Peri-operative blood loss was also significantly more in the Prolift® group (177.79ml vs 79.14ml,  $p < 0.005$ ). There was 1(3.4%) case of bladder injury in the SSF group, but no visceral injury in the Prolift® group.

The incidence of voiding difficulty (31% vs 2.9%,  $p < 0.005$ ), prolonged IDC (20.7% vs 0%) and thigh pain (13.8% vs 8.8%) was higher in the SSF than Prolift® group.

At 36 months, 28 (96.6%) and 31 (91.2%) patients were available for follow-up (inclusive of telephone interview) in the SSF and Prolift® group respectively. There was no recurrent apical prolapse in the SSF group, but 2(6.5%) cases of vault prolapse in the Prolift® group.

2 cases of recurrent cystocele were reported in each group (8.7% in the SSF group and 9.1% in the Prolift® group). However, none of these patients were symptomatic.

The incidence of de novo urinary incontinence was higher following Prolift® surgery than SSF surgery (SUI: 16.1% vs 3.6%; UUI: 9.7% vs 3.6%).

The incidence of mesh erosion in the Prolift® group was between 3.0% to 4.2%; and 0% in the SSF group throughout the follow-up durations.

There was no reported dyspareunia or pelvic pain cases after Prolift® surgery at all follow-up intervals. However following SSF surgery, there were 2(6.9%) cases of pelvic pain at 6 months and 1(3.8%) case of dyspareunia at 12 months.

The objective cure rate at 3 years following SSF and Prolift® surgery was 96.4% and 90.3% respectively. The subjective cure rate was 100% following SSF surgery, and 93.5% following Prolift® surgery.

### Interpretation of results

In experienced hands, SSF and Gynecare Prolift® are equally safe with minimal complications. The incidence of long-term genitourinary dysfunction was similar in both groups, with acceptably low risk of mesh erosion.

### Concluding message

After 3 years, both surgical methods were effective in achieving anatomical apical correction and patients from both groups were satisfied with their surgery outcome.

### References

1. Baden WF, Walker TA, Lindsay HJ. The vaginal profile. *Tex Med J* 1968;64:56–58

### Disclosures

**Funding:** Nil. **Clinical Trial:** No **Subjects:** HUMAN **Ethics Committee:** Central Institutional Review Board (CIRB) **Helsinki:** Yes **Informed Consent:** Yes